

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims

Claim 1 (canceled)

Claim 2 (previously amended): A process according to claim 31, in which Si/T of the modified zeolite is at least 20.

Claim 3 (previously amended): A process according to claim 31, in which Si/T of the modified zeolite is over 60.

Claim 4 (previously amended): A process according to claim 31, in which Si/T of the modified zeolite is at most 600.

Claim 5 (previously amended): A process according to claim 31, in which Si/T of the modified zeolite is at most 300.

Claim 6 (previously amended): A process according to claim 31, in which T is aluminum (Al).

21 Claim 7 (previously amended): A process according to claim 32, wherein the EU-1 zeolite is obtained by synthesis using at least one solution of an acid.

Claim 8 (currently amended): A process according to claim 31, wherein the zeolite is obtained using at least one heat treatment of a EU-1 zeolite obtained by synthesis the starting zeolite followed by at least one treatment with a solution of an acid.

Claim 9 (previously amended): A process according to claim 31, in which the EU-1 zeolite is obtained by dealuminating by at least one heat treatment followed by at least one treatment using a chemical dealuminating compound which is ammonium hexafluorosilicate, silicon tetrachloride, or ethylenediaminetetra-acetic acid, optionally in its sodium or disodium form.

Claim 10 (previously amended): A process according to claim 31, in which the EU-1 zeolite is obtained by dealuminating by at least one treatment

with a chemical dealuminating compound which is ammonium hexafluorosilicate, silicon tetrachloride, or ethylenediaminetetra-acetic acid, optionally in its sodium and disodium form.

Claim 11 (canceled)

Claim 12 (currently amended): A process according to claim 31, wherein the zeolite catalyst comprises at least one matrix and 0.5% to 99.5% by weight of EU-1 zeolite with respect to the matrix + zeolite mixture.

Claims 13-16 (canceled)

Claim 17 (previously amended): A process according to claim 31, in which the hydro-dehydrogenating element is niobium and/or rhenium.

Claim 18 (canceled)

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Claim 19 (previously amended): A process for improving the pour point of a feed comprising paraffins containing more than 10 carbon atoms, in which process the feed to be treated is brought into contact with a catalyst based on EU-1 zeolite, at least partially in its acid form, and at least one hydro-dehydrogenating element, at a temperature of 170°C to 500°C, a pressure of 1 to 250 bar and at an hourly space velocity of 0.05 to 100 h⁻¹, the presence of hydrogen in a proportion of 50 to 2000 l/l of feed.

Claim 20 (original): A process according to claim 19, in which the hydro-dehydrogenating element is a noble group VIII element.

Claim 21 (original): A process according to claim 19, in which the hydro-dehydrogenating element is a combination of at least one group IV metal or compound and at least one non noble group VIII metal or compound.

Claim 22 (original): A process according to claim 21, in which the catalyst contains phosphorous.

Claim 23 (previously amended): A process according to claim 19, in which the catalyst contains a matrix and 0.5% to 99.9% by weight of EU-1 zeolite with respect to the matrix + zeolite mixture.

Claim 24 (canceled)

Claim 25 (previously amended): A process according to claim 19, in which the initial boiling point of the feed is over 175°C.

Claim 26 (previously amended) A process according to claim 19, in which the initial boiling point of the feed is over 280°C.

Claim 27 (previously amended): A process according to claim 19, in which the initial boiling point of the feed is over 380°C.

Claim 28 (previously amended): A process according to claim 19, in which the feed comprises paraffins containing 15 to 50 carbon atoms.

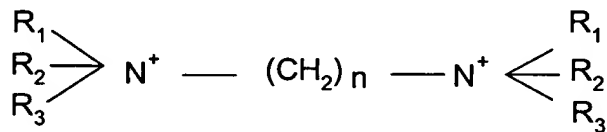
Claim 29 (previously amended): A process according to claim 19, in which the feed contains paraffins containing 15 to 40 carbon atoms.

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Claim 30 (currently amended): A process according to claim 19, in which the ~~compound~~ feed to be treated is ~~present in~~ a hydrocarbon feed selected from the group consisting of middle distillates, gas oils, vacuum residues, hydrocracking residues, paraffins from the Fischer-Tropsch process, synthesized oils, gas oil cuts and FCC middle distillates, oils, and polyalphaolefins.

Claim 31 (previously added): A process for improving the pour point of a feed comprising paraffins containing more than 10 carbon atoms, comprising contacting the feed with a catalyst based on EU-1 zeolite, at least partially in its acid form, and at least one hydro-dehydrogenating element, wherein the EU-1 zeolite comprises silicon and an element T which is Al, Fe, Ga, or B, produced by a process in which at least a portion of elements T are removed from a starting zeolite, whereby the modified zeolite has a global atomic ratio Si/T higher than that of the starting zeolite, by at least 10% of the Si/T ratio of the starting zeolite.

Claim 32 (New): A process for improving the pour point of a feed comprising paraffins containing more than 10 carbon atoms, in which process the feed to be treated is brought into contact with a catalyst based on EU-1 zeolite, at least partially in its acid form, and at least one hydro-dehydrogenating element, at a temperature of 170°C to 500°C, a pressure of 1 to 250 bar and at an hourly space velocity of 0.05 to 100 h⁻¹, the presence of hydrogen in a proportion of 50 to 2000 l/l of feed and wherein the EU-1 zeolite is produced

with at least one alkylated derivative of a polymethylene - diamine having the formula

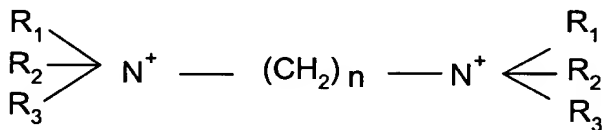


or an amine degradation product thereon, wherein n is 3 to 12 and R₁ to R₆ are each independently alkyl or hydroxyalkyl groups, containing from 1 to 8 carbon atoms and up to five of the groups R₁-R₆ can be hydrogen.

Claim 33 (New) A process according to claim 32, wherein the polymethylene α-ω diamine is an alkylated hexamethylene diamine.

Claim 34 (New) A process according to claim 33, wherein the polymethylene α-ω diamine is hexamethonium salt.

Claim 35 (New) A process for improving the pour point of a feed comprising paraffins containing more than 10 carbon atoms, in which process the feed to be treated is brought into contact with a catalyst based on EU-1 zeolite, at least partially in its acid form, and at least one hydro-dehydrogenating element, wherein the EU-1 zeolite comprises silicon and an element T which is Al, Fe, Ga, or B, produced by a process in which at least a portion of elements T are removed from a starting zeolite, whereby the modified zeolite has a global atomic ratio Si/T higher than that of the starting zeolite, by at least 10% of the Si/T ratio of the starting zeolite and wherein the EU-1 zeolite is produced with at least one alkylated derivative of a polymethylene - diamine having the formula



of an amine degradation product thereon, wherein n is 3 to 12 and R₁ to R₆ are each independently alkyl or hydroxyalkyl groups, containing from 1 to 8 carbon

atoms and up to five of the groups R_1 - R_6 can be hydrogen.

01 Claim 36 (New): A process according to claim 35, wherein the polymethylene α - ω diamine is an alkylated hexamethylene diamine.

Claim 37 (New): A process according to claim 36, wherein the polymethylene α - ω diamine is hexamethonium salt.
